



15-W

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/532,082 Confirmation No. 8287

Applicant : Takashi OCHI et al.

Filed : April 21, 2005

TC/A.U. : 1774

Examiner : Unknown

Dkt. No. : IPE-056

Cust. No. : 20374

REQUEST FOR CORRECTED FILING RECEIPT

Mail Stop Missing Parts

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

February 7, 2006

Sir:

A corrected filing receipt is respectfully requested for the above-identified application.

The filing receipt incorrectly identifies the number of total claims as "29". The number of total claims should be identified as --30--. The filing receipt also incorrectly identifies the number of independent claims as "1". The number of independent claims should be identified as --4--.

The claims were amended in a preliminary amendment filed with the application on April 21, 2005. A copy of the preliminary amendment is enclosed. There are 30 total claims and 4 independent

U.S. PATENT APPLN. S.N. 10/532,082
REQUEST FOR CORRECTED FILING RECEIPT

claims identified in the preliminary amendment.

Please also note that the receipt of a filing fee of \$1,730.00 is acknowledged in the filing receipt. This fee is payment for the U.S. national stage filing, search and examination fees (\$900.00), late declaration fee (\$130.00), ten total claims in excess of twenty, i.e., thirty total claims (\$500.00) and one independent claims in excess of three, i.e., four independent claims (\$200.00).

A copy of the filing receipt with the errors marked in red is enclosed.

In the event any fees are required, please charge our Deposit Account No. 111833.

Respectfully submitted,

KUBOVCIK & KUBOVCIK



Keiko Tanaka Kubovcik
Reg. No. 40,428

Atty. Case No. IPE-056
The Farragut Building
Suite 710
900 17th Street, N.W.
Washington, D.C. 20006
Tel: (202) 887-9023
Fax: (202) 887-9093
KTK/jbf
Enclosures: Copy of Preliminary Amendment
Marked-up Filing Receipt



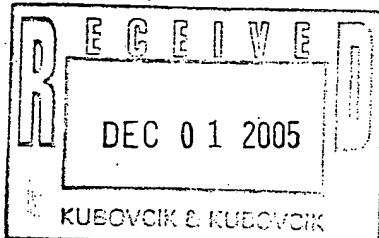
UNITED STATES PATENT AND TRADEMARK OFFICE

COPY

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO.	DRAWINGS	TOT CLMS	IND CLMS
10/532,082	04/21/2005	1774	1730	IPE-056	17	29 30	4

20374
 KUBOVCIK & KUBOVCIK
 SUITE 710
 900 17TH STREET NW
 WASHINGTON, DC 20006



CONFIRMATION NO. 8287

FILING RECEIPT



OC000000017513525

Date Mailed: 11/30/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Takashi Ochi, Shizuoka, JAPAN;
 Akira Kishiro, Shizuoka, JAPAN;
 Shuichi Nonaka, Shiga, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 20374.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP03/13477 10/22/2003

Foreign Applications

JAPAN 2002-308048 10/23/2002
 JAPAN 2002-315726 10/30/2002

Projected Publication Date: 03/02/2006

Non-Publication Request: No

Early Publication Request: No

Title



Nanofiber aggregate, polymer alloy fiber, hybrid fiber, fibrous structures, and processes for production of them

Preliminary Class

428

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

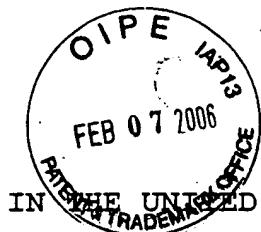
This license is to be retained by the licensee and may be used at any time on or after the effective date thereof

unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop PCT

Intl.

Appl. No. : PCT/JP2003/013477

Applicant : Takashi OCHI et al.

Intl. Appl.

Filed : October 22, 2003

TC/A.U. : Not Assigned

Examiner : Not Assigned

Dkt. No. : IPE-056

Cust. No. : 20374

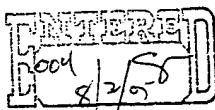
PRELIMINARY AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 21, 2005

Sir:

Prior to calculation of the fee and examination on the merits of the above-identified patent application, please amend the application as follows:



U.S. National Stage of
PCT/JP2003/013477
PRELIMINARY AMENDMENT

PATENT

IN THE SPECIFICATION:

Please insert the following paragraph at the beginning of the specification.

This application is a 371 of international application PCT/JP2003/013477, which claims priority based on Japanese patent application Nos. 2002-308048 and 2002-315726 filed October 23 and October 30, 2002, respectively, which are incorporated herein by reference.

IN THE CLAIMS:

1. (original) An aggregate of nanofibers made of a thermoplastic polymer, wherein single fiber fineness by number average is in a range from 1×10^{-7} to 2×10^{-4} dtex and 60%, in fineness ratio, or more of single fibers are in a range from 1×10^{-7} to 2×10^{-4} dtex in single fiber fineness.

2 - 3. (canceled)

4. (original) The aggregate of nanofibers according to claim 1, wherein 50%, in fineness ratio, or more of single fibers that constitute the aggregate of nanofibers are in a section having a width of 30 nm in diameter of the single fibers.

5 - 6. (canceled)

7. (original) The aggregate of nanofibers according to claim 1, wherein the thermoplastic polymer comprises one selected from among polyester, polyamide and polyolefin.

8. (original) The aggregate of nanofibers according to claim 1, that has a strength of 1 cN/dtex or higher.

9. (canceled)

10. (original) The aggregate of nanofibers according to claim 1, that has a rate of elongation at absorbing water of 5% or higher in the longitudinal direction of the yarn.

11. (original) The aggregate of nanofibers according to claim 1, that contains a functional chemical agent.

12. (original) A fibrous material that includes the aggregate of nanofibers according to claim 1.

13. (canceled)

14. (original) The fibrous material according to claim 12, wherein the aggregate of nanofibers is encapsulated in a hollow space of a hollow fiber.

15. (original) The fibrous material according to claim 14, wherein the hollow fiber has multitude of pores measuring 100 nm or less in diameter in the longitudinal direction.

16. (original) The fibrous material according to claim 12, that contains a functional chemical agent.

17. (original) The fibrous material according to claim 12, wherein the fibrous material is selected from among yarns, a wad of cut fibers, package, woven fabric, knitted fabric, felt, nonwoven fabric, synthetic leather and sheet.

18. (original) The fibrous material according to 17, wherein the fibrous material is a laminated nonwoven fabric made by stacking a sheet of nonwoven fabric that includes the aggregate of nanofibers and a sheet of other nonwoven fabric.

19. (original) The fibrous material according to claim 12, wherein the fibrous material is a fibrous article selected from among clothing, clothing materials, products for interior, products for vehicle interior, livingwares, environment-related materials, industrial materials, IT components and medical devices.

20. (original) A liquid containing the aggregate of nanofibers according to claim 1 dispersed therein.

21. (original) A polymer alloy fiber that has islands-in-sea structure consisting of two or more kinds of organic polymers of different levels of solubility, wherein the island component is made of a low solubility polymer and the sea component is made of a high solubility polymer, while the diameter of the island domains by number average is in a range from 1 to 150 nm, 60% or more of the island domains in area ratio have sizes in a range from 1 to 150 nm in diameter, and the island components are dispersed in linear configuration.

22. (canceled)

23. (original) The polymer alloy fiber according to claim 21, wherein, among the island domains included in the polymer alloy fiber, 60%, in area ratio, or more of the island domains are in a section having a width of 30 nm in diameter of the island domains.

24. (currently amended) The polymer alloy fiber according to claim 21, wherein the content of the island component is in a range from ~~10 to 30%~~ 10 to 50% by weight of the entire fiber.

25 - 26. (canceled)

27. (original) A polymer alloy fiber that is a conjugated fiber comprising the polymer alloy according to claim 21 and another polymer that are conjugated together.

28. (original) The polymer alloy fiber according to claim 21, wherein the value of CR that is a measure of crimping characteristic is 20% or more, or the number of crimps is five per 25 mm or more.

29. (original) The polymer alloy fiber according to claim 21, that has Uster unevenness is 5% or less.

30. (original) The polymer alloy fiber according to claim 21, that has a strength of 1.0 cN/dtex or higher.

31. (original) A fibrous material that includes the polymer alloy fiber according to claim 21.

32. (original) The fibrous material according to claim 31, wherein the fibrous material is selected from among yarns, a wad of cut fibers, package, woven fabric, knitted fabric, felt, nonwoven fabric, synthetic leather and sheet.

33. (original) The fibrous material according to claim 31, that includes the polymer alloy fibers and other fibers.

34. (original) The fibrous material according to claim 31, wherein the fibrous material is a fibrous article selected from among clothing, clothing materials, products for interior, products for vehicle interior, livingwares, environment-related materials, industrial materials, IT components and medical devices.

35 - 38. (canceled)

39. (original) A polymer alloy pellet that has islands-in-sea structure comprising two kinds of organic polymers of different levels of solubility, wherein the island component is made of a low solubility polymer and the sea component is made of a high solubility polymer, while melt viscosity of the high solubility polymer is 100 Pa·s or lower, or difference in melting point between the high solubility polymer and the low solubility polymer is in a range from -20 to +20°C.

40. (original) An organic/inorganic hybrid fiber that includes the aggregate of nanofibers according to claim 1 in a proportion of

5 to 95% by weight, wherein at least part of the inorganic material exists within the aggregate of nanofibers.

41. (original) A fibrous material that includes the organic/inorganic hybrid fiber according to claim 40.

42 - 45. (canceled)

46. (original) A porous fiber wherein 90% by weight or more of the composition consists of an inorganic material, while multitude of pores are provided in the longitudinal direction and mean pore diameter of the pores in the cross section in the minor axis direction is in a range from 1 to 100 nm.

47. (original) A fibrous material that includes the porous fibers according to claim 46.

48 - 51. (canceled)

U.S. National Stage of
PCT/JP2003/013477
PRELIMINARY AMENDMENT

PATENT

REMARKS

The specification has been amended to identify information relating to the international application and priority application of the present application.

Claims 2, 3, 5, 6, 9, 13, 22, 25, 26, 35-38, 42-45 and 48-51 have been canceled. In claim 24, the range of "10 to 30% by weight" has been amended to "10 to 50% by weight". Support for this amendment can be found on page 22, lines 7 to 16.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

KUBOVCIK & KUBOVCIK



Keiko Tanaka Kubovcik
Reg. No. 40,428

Atty. Case No. IPE-056
The Farragut Building
Suite 710
900 17th Street, N.W.
Washington, D.C. 20006
Tel: (202) 887-9023
Fax: (202) 887-9093
KTK/jbf